

IN THE CLAIMS:

The following is a complete listing of claims in this application.

Claims 1-6 (canceled).

7. (new) Method for producing a plurality of multi-layer carbon brushes, each of said brushes comprising, at least two electrically conductive functional layers made of carbon material and at least one layer made of electrically insulating material disposed between said electrically conductive layers, comprising the steps of:

placing into a mold layers of carbon-containing material in powder form, and electrically insulating material in powder or film form, in a sequence corresponding to the sequence of the multi-layer carbon brushes to be produced,

pressing the layers in the mold to form a plate,

heat treating the plate, and

dividing the heat treated plate into said plurality of brushes.

8. (new) The method of claim 7, wherein the electrically conductive material is at least one material selected from the group consisting of a synthetic resin powder, an organic film, an inorganic film tissue film, a fiber mat, and a self-adhesive or adhesive-activated film.

9. (new) The method of claim 8, wherein inorganic film comprises Al_2O_3 film.

10. (new) The method of claim 8, wherein the synthetic resin is phenol or epoxy resins.

11. (new) The method of claim 7, wherein the electrically conductive powder is at least one powder selected from the group consisting of natural graphite, synthetic graphite, phenol resin and pitch.

12. (new) The method of claim 7, wherein the carbon-containing material comprises about 50% by weight natural

graphite and about 50% by weight synthetic graphite.

13. (new) The method of claim 7, wherein the carbon-containing material comprises about 25% by weight of phenol resin or about 40% by weight of pitch.

14. (new) (new) The method of claim 7, wherein the carbon-containing material comprises about 50% by weight of natural graphite.

15. (new) The method of claim 7, wherein the insulating material is present in an amount sufficient that the insulating layer in the resultant brushes is between 100 and 500 μm after pressing.